## Exhibit 1

## Unit 7H: OR Assessment Plan/Instrument

Note: This is a page with directions concerning a key task for NICHE (QR Assessment Instrument).

Your task for this unit is to begin to thinking about developing and/or adapting a QR assessment plan & instrument that corresponds to the learning goals you articulated and the QR lesson/assignment you have developed. This should be submitted by the end unit 8 (August 7th). Please Note: By assessment we do not mean a way in which you will evaluate your assignment; rather, we want you to develop/adapt a separate instrument that corresponds to your 3 learning goals (and tells you whether or not your QR lesson/assignment succeeded in achieving those goals!). To develop your assessment instrument, we suggest you return to your learning goals and think of a question for each goal that would give you back information as to whether or not you succeeded in reaching that goal!

Within one week after the close of the instructional units in NICHE (August 15), you will want to provide peer feedback on your peer collaborator's QR assessment instrument. (While you have been assigned one peer colleague for this task, we encourage you to review the QR assessment instruments of multiple colleagues and you are welcome to provide additional feedback to them as well!)

Please post your QR assessment instrument and peer feedback in the blog entitled, "QR Assessment Instrument." After you receive peer feedback, you will want to revise your QR assessment instrument in response to the peer feedback you receive (but please do not do this until August 15th to ensure that you have received all the feedback from your colleagues). Within two weeks after the instructional units in NICHE are over (August 22nd), we ask you to submit your revised QR assessment instrument that responds to the feedback you have received from your colleagues. Finally, by the end of July in the summer following NICHE, we ask you to provide us with a summary of your assessment results and the actual data that you gathered from administering your assessment instrument (additional compensation is provided for that).

To create your own blog, please select "new entry" (there are guidelines for creating your QR assessment instrument below). Please note that if you wish to attach a file to your blog you may do this by selecting the icon in the final row that is third from the left!

Please note that each participant should create a separate blog (to allow for peer feedback) in doing this!

## **QR** Assessment Instrument

Please restate your revised QR learning goals that you developed in this blog along with your QR assessment instrument. We ask that your QR assessment be simple and consist of 3 questions (or scoring rubrics) that directly correspond to the 3 learning goals you have articulated (if you are undertaking a pretest/post-test design, you may want to develop two versions of the instrument). PLEASE KEEP YOUR ASSESSMENT INSTRUMENT SIMPLE and include only 3 questions/scoring rubrics, etc.!

You assessment instrument should be designed to measure whether or not (or the extent to which) your QR lesson/assignment succeeded in teaching students the 3 learning goals you put forward. The assessment should be designed to give feedback to you as an instructor! Please indicate when and how you plan to administer your assessment instrument.

Please consider the guidelines for developing and providing peer review on assessment instruments (see below) as you adapt/develop your own!

Please note that there are examples of course-specific assessment instruments on our <u>instructional</u> materials from NICHE webpage.

Assessments can take a huge variety of forms and we encourage you to assess in a way that makes sense for your course and for your learning objectives. However, we also strongly encourage you to assess narrowly, specifically focusing on your QR lesson/assignment, rather than the course as a whole or the college experience as a whole.

Your assessment instrument should correspond to the learning goals that you have articulated and evaluate whether or not your course and/or your QR assignment/exercise effectively taught the QR skills you set out to teach. Since you have articulated 3 learning goals [in each of three areas, e.g., (a) Knowledge and conceptual understanding; (b) thinking and other skills; and (c) attitudes, values, dispositions and habits of mind], we ask you to develop a simple 3-question assessment instrument that gets at these 3 learning goals. In addition, a pre-test and post-test design may be helpful in assessing the effectiveness of your instruction.

Guidelines for Developing and Providing Feedback on QR Assessment Instrument

- (1) Does the assessment instrument (or instruments if there are two versions) include 3 questions (or scoring rubrics, etc.) that are clear and straightforward?
- (2) Can (and how will) the results of the assessment plan and instrument be used to evaluate whether the instructor effectively taught specific QR skills and/or achieved his or her QR learning goals? How do the skills assessed in the instrument correspond to the QR learning goals articulated by the instructor as well as those taught in the QR lesson plan in terms of (a) knowledge and conceptual understanding; (b) thinking and other skills; and (c) attitudes, values, dispositions and habits of mind?
- (3) What are the strengths and weaknesses of the QR assessment plan and instrument? Please indicate at least one way in which the assessment instrument could be improved. In responding to this question, please consider the following:
- (a) Will the assessment plan be able to evaluate the effectiveness of the QR lesson plan (including assignments, readings, etc.)? For example, does the instructor plan to use a pre-test/post-test design, is there a comparison group, etc.
- (b) Does the QR assessment instrument extend beyond just being a math skills test and emphasize the ability to reason with quantitative information?
- (c) Is the assessment instrument valid (i.e., does it get at what the instructor is trying to measure)?
- (d) Is the instrument sound? For example, if the instrument relies on multiple choice questions, are the response options mutually exclusive and is the correct answer clearly identifiable? If the assessment instrument (or a specific question) relies on a rubric, do the scoring criteria make sense and will the exercise authoritatively assess a QR skill (or skills)?
- (4) Is the assessment instrument independent of the course QR lesson(s)/assignment(s)? In other words, can it be used to evaluate the effectiveness of the QR lesson(s)/assignment(s)?